

What is claimed is:

1. An articulated manipulator comprising:
a plurality of links arranged in series; and
joints pivotally connecting the adjacent links;

wherein the joints includes coaxial joints each connecting the two adjacent links so that the two adjacent links are able to turn about a rotation axis coaxial with the axes of the two adjacent links, and diagonal joints each connecting the two adjacent links so that the two adjacent links are able to turn about an inclined rotation axis inclined at an angle of 45° to the axes of the two adjacent links,

at least one specific link among those links has opposite ends connected by the diagonal joints to the adjacent links, and two rotation axes about which the adjacent links are turned, respectively, relative to the specific link are perpendicular to each other.

2. The articulated manipulator according to claim 1, wherein the specific link is in a middle part of the series arrangement of the links.

3. The articulated manipulator according to claim 1, wherein the links are first to sixth links,

the first link is connected to a base for rotation about a rotation axis aligned with the axis of the first link,

the first and the second link are connected by the diagonal joint,

the second and the third link are connected by the diagonal joint so as to be turnable about a rotation axis parallel to the rotation axis about which the first and the second link are turned,

the third and the fourth link are connected by the diagonal joint so as to be turnable about a rotation axis perpendicular to the rotation axes about which the second and the third link are turned,

the fourth and the fifth link are connected by the

coaxial joint, and

the fifth and the sixth link are connected by the diagonal joint.

4. The articulated manipulator according to claim 1, wherein the links are first to sixth links,

the first link is connected to a base for rotation about a rotation axis aligned with the axis of the first link,

the first and the second link are connected by the diagonal joint,

the second and the third link are connected by the diagonal joint,

the third and the fourth link are connected by the diagonal joint so as to be turnable about a rotation axis perpendicular to a rotation axis about which the second and the third link are turned,

the fourth and the fifth link are connected by the coaxial joint,

the fifth and the sixth link are connected by the diagonal joint, and

the second link consists of two sublinks connected for rotation about their axes.

5. The articulated manipulator according to claim 3 or 4, wherein the sixth link is provided with a twist unit for connecting a predetermined terminal device to the sixth link so as to be rotatable about a rotation axis aligned with the axis of the sixth link.